



Aviation Element of the 2045 Metropolitan Transportation Plan



Cumberland County



Town of Eastover



City of Fayetteville



Fort Bragg



Harnett County



Hoke County



Town of Hope Mills



Town of Parkton



City of Raeford



Robeson County



Town of Spring Lake

February 28, 2019

Continuing • Comprehensive • Cooperative • Transportation Planning

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INTRODUCTION

The Fayetteville Regional Airport (Grannis Field), owned by the City of Fayetteville, serves a 12-county area in the Sandhills region of North Carolina, and Fort Bragg Military Reservation. A large Army Post, Fort Bragg extends into parts of Cumberland, Hoke, and Harnett Counties. The other eight counties served by the airport are Robeson, Bladen, Sampson, Lee, Moore, Montgomery, Richmond, and Scotland. The airport is conveniently located on 1,343 acres along the I-95 corridor. The Fayetteville City Council appoints seven voting members of the Airport Commission. Three ex-officio members represent the Fayetteville Cumberland County Chamber of Commerce, Fayetteville Area Convention and Visitors Bureau and the Fayetteville Business and Professional League. Grannis Field opened in 1949 with services provided by Piedmont Airlines' 21 passenger DC-3s. The following year, the 1950 Cumberland County census population was 96,006. According to the 2010 Census, the Fayetteville Urbanized Area population was now 366,383. With increased flight options and more competition, the Fayetteville Regional Airport has been able to be more competitive in recent years with larger nearby commercial airports.

BACKGROUND

Aviation travel is a piece of the Fayetteville Area Metropolitan Planning Organization's multi-modal Metropolitan Transportation Plan and includes information pertaining to the Fayetteville Regional Airport and its latest Master Plan as well as efforts to maintain the viability of the airport by addressing land use restrictions through regulations. The Fayetteville Regional Airport provides daily flights currently to Charlotte, North Carolina and Atlanta, Georgia through American Airlines and Delta with regional carriers. The airport has two runways. The longest (04/22) is 7,712 feet long and 150 feet wide. The second (10/28) is 4,801 feet long and 150 feet wide. The airport is equipped with visual and instrument navigation aids. The airport also offers general aviation in the northern portion of the property and is used as a back-up when Pope Army Airfield closes for runway repair work. The Airport Master Plan was updated in 2016 and is reviewed by the Federal Aviation Administration. In 2014 a terminal area plan was developed in order to prioritize and cost out terminal building improvements to meet the recent growth in airline passenger traffic. Part I of the terminal improvements to the terminal began in November of 2017 and are scheduled for completion soon. Part II of the terminal renovation will begin in November 2019 with completion expected in late 2021. The terminal improvements will provide a \$44 million update including a new concourse, restaurant, and overall remodel.

THE FAYETTEVILLE REGIONAL AIRPORT MASTER PLAN

The 2005 Fayetteville Regional Airport Master Plan had forecast enplanements to be 191,217 by the year 2023, which was exceeded in 2008. Annual enplanements exceeded 250,000 in 2011 and maintained that until 2013, when the numbers started regressing. Many of the capital projects suggest in 2005 Master Plan Update have been developed. The 2016 Update will recharge justifications for new capital projects. The FAA requires all Airports in the National Plan of Integrated Airports to provide a current blueprint for long-term airport development, with

a recommended 20-year implementation plan, in order to remain eligible for federal project funding under the Airport Improvement Plan. The 2016 proposed Airport Improvement Plan is shown in the table below.

The consultants identified six steps needed as part of the Master Plan:

- Establishing optimal outcomes
- Conducting an inventory of existing facilities
- Forecasting aviation activity
- Determining the facility requirements needed to meet future forecast demand
- Developing airport development concepts
- Preparing an implementation plan

For more information on these six steps, please refer to the Fayetteville Regional Airport Master Plan Final Report, September 2005, prepared by the HNTB Corporation.

<https://fayettevillenc.gov/home/showdocument?id=1146>

FAYETTEVILLE REGIONAL AIRPORT Airport Improvement Program (AIP)

Project	Year	AIP #	Cost
New Airfield Lighting Vault	2009	33	\$1.9 million
Centurion Corporate Hangar	2009	Private	N/A
Runway 4/22 Rehabilitation	2009	34	\$6.3 million
North GA West Ramp Rehabilitation	2010	State Funds	\$635,000
Revenue Parking Lot Improvements	2010	Local	\$181,490
Aircraft Rescue and Firefighting Building Improvements	2011	35,36	\$1.1 million
Snow Removal Equipment Shelter	2011	32	\$179,500
Sierra Nevada Corporate Hangar	2011	Private	N/A
Cargo to Corporate Office/Shop/Storage Conversion	2005	Private	N/A
Taxiway "A" Rehabilitation	2012	37	\$5.4 million
Runway 4 and Runway 10 Approach Clearing	2012	State Funds	\$208,000
Gate B4 Passenger Boarding Bridge	2012	PFC	\$387,000
Air Carrier Apron Rehabilitation – Phase 1	2013	38	\$4.2 million
Runway 4 RSA Improvements & Taxiway "A" Extension	2013	39,40	\$3.3 million
Runway 4/22 Paved Shoulders	2014	41	\$3.6 million
Taxiway "J" and "K" Rehabilitation	2015	42	\$2.7 million
Air Carrier Apron Rehabilitation, Phase 2	2015	42	\$2.2 million
Airport Master Plan Update, Part 1	2015	42	\$323,500
Replace Marker Beacon with DME, Runway 4 ILS	2009	FAA	N/A
New Employee Parking Lot	2016	Local/CFC	\$668,000

Source: City of Fayetteville

BRAC RTF AVIATION TRANSPORTATION ASSESSMENT

Air Passenger Service Demand at Fayetteville Regional Airport

According to a report commissioned by BRAC RTF, commercial passenger aircraft departures from Fayetteville Regional Airport (FAY) grew at a rate of 2.8% annually between 2002 and 2007, more than keeping pace with the national annual rate of 2.7%. Passenger enplanements lagged somewhat at a 1.5% average annual increase, compared with a national rate of 2.5% annually. Air passenger growth was extremely strong between 2002 and 2006 with an annual increase of 3.8%. Passenger traffic increased annually by 12 and 12.8 percent in both 2007 and 2008, as compared to the previous years. The overall increase in the 2002-2008 time span was of 35% for enplanements and 32% for deplanements.

In addition to the level of economic activity, which affects demand for air passenger service in general, the ups and downs of air service at FAY reflect the changing structure and strategy of the airline industry. In the early 1990s, United provided service to Dulles for six months. Air service was disrupted when American pulled out of its hub at RDU and discontinued the connecting service to Fayetteville. The airline also eliminated its direct flights to Dallas-Fort Worth via Greensboro. Fayetteville service may have also been hurt by the arrival of Southwest Airlines at RDU exerted downward pressure on airfares at that airport, drawing a greater number of passengers from the FAY service area.

Allegiant Air started twice weekly air service from Fayetteville to Orlando-Sanford Airport, FL in November 2006. Allegiant Air was Fayetteville's first low fare carrier and as such required an 80 percent, or higher, load factor. This service was discontinued on April 15, 2007 because load factors averaged 50 percent. Most recently, service from Fayetteville to Washington, D.C. was carried by United Airlines, but that route was discontinued as of March 7, 2019.

Local demand has been stronger since Delta introduced all-jet service to FAY in the late 1990s. US Airways followed later with 50-seat regional jets. Currently, both American and Delta occasionally provide service with 70-86 seat regional jets and one main line aircraft with 150 seats. The increase in service also corresponds to a change in pricing policy trends that has slowed the generally rising relative cost of flying from Fayetteville Regional Airport.

The September 2008 Fort Bragg Regional Growth Plan reports that military travel accounted for approximately 70% of the air traffic between the Fayetteville Regional Airport and Washington D.C. airports in 2007 and although air traffic between Fort Bragg and Washington D.C. has decreased in the last few years, it has shown an increase from the Raleigh Durham Airport.

Source: http://www.bracrtf.com/documents/04_Transportation.pdf

Current flight offerings are as follows:

AMERICAN AIRLINES

- Twelve (6) daily round trips to Charlotte

DELTA EXPRESS

- Eight (4) daily round trips to Atlanta (including one Airbus A320 aircraft w/first class)

Figure 1. Source: Fayetteville Regional Airport Historical Aviation Activity

Table 3-1. Historical Aviation Activity

Year	Enplanements			Operations				
	Air Carrier Enplanements	Air Taxi Enplanements	Total	Air Carrier	Air Taxi & Commuter	GA	Military	Total
2000	72,584	79,377	151,961	4,686	7,874	30,570	12,768	55,898
2001	39,925	97,527	137,452	2,151	9,800	33,901	10,036	55,888
2002	2,159	125,213	127,372	523	11,258	39,134	7,508	58,423
2003	2,448	118,728	121,176	515	8,970	30,463	6,517	46,465
2004	2,700	144,880	147,580	617	8,941	30,433	7,533	47,524
2005	2,540	158,442	160,982	1,473	8,036	29,959	7,617	47,085
2006	2,830	146,887	149,717	820	8,458	34,547	9,468	43,825
2007	9,652	163,113	172,765	537	10,070	34,589	10,346	55,542
2008	3,226	188,288	191,514	747	10,156	34,012	8,076	52,991
2009	2,053	223,555	225,608	1,754	9,635	27,193	7,122	45,704
2010	2,226	249,449	251,675	2,454	10,752	29,767	9,435	52,408
2011	3,158	259,059	262,217	1,717	12,131	25,824	10,276	49,948
2012	2,4386	232,405	256,791	1,262	12,002	24,404	6,902	44,570
2013	30,633	215,716	246,349	1,159	12,611	24,714	6,548	45,032
2014	31,652	202,092	233,744	1,582	10,560	20,820	4,761	37,723
2015	44,741	174,640	219,381	1,420	8,924	22,201	3,930	36,475
2016*	52,871	172,650	225,521	2,911	7,311	17,391	7,231	34,844

Source: 2016 FAA Terminal Area Forecast issued January 2017. *Enplanement data for 2016 is derived from the 2016 TAF Forecasts and 2016 Operations data is actual data from the FAA ATADS database.

2030 GROWTH VISION PLAN

The 2030 Growth Vision Plan Policies and Actions finalized in September 2008 was a cooperative effort between all of the jurisdictions in Cumberland County, public agencies and the community to devise a vision for the entire area. The 2030 Growth Vision Plan is the most recent area-wide comprehensive land use plan available. The plan addressed seventeen vision statements:

1. *A More Diversified Economy*
2. *Well Managed Growth*
3. *Infrastructure That Keeps Pace*
4. *A Balanced Transportation System*
5. *Community Oriented Schools*
6. *Expanded Parks & Recreation*
7. *Preserved Open Space & Rural Character*
8. *Quality Housing & Residential Development*
9. *Compatible Commercial Development & Services*
10. *Attractive Community Appearance & Image*
11. *A Healthy, Sustainable Environment*
12. *Vibrant Downtown Areas*
13. *The Cape Fear River, A Regional Asset*
14. *Public Safety Services Closer to the People*
15. *Senior Citizens Well Served*
16. *Intergovernmental Cooperation & Efficiency*
17. *An Active, Involved Citizenry*

As part of Vision No. 4, several policies were written to better address the local aspirations for better transportation in the area, to include the Fayetteville Regional Airport:

Policy 4.10: Opportunities to enhance air passenger service at FAYETTEVILLE REGIONAL AIRPORT shall be supported. Land uses such as industrial development, warehousing and distribution shall be the preferred development activities on lands influenced by airport impacts (e.g. noise and safety issues).

Source: <http://www.co.cumberland.nc.us/planning.aspx>

AIRPORT OVERLAY DISTRICT

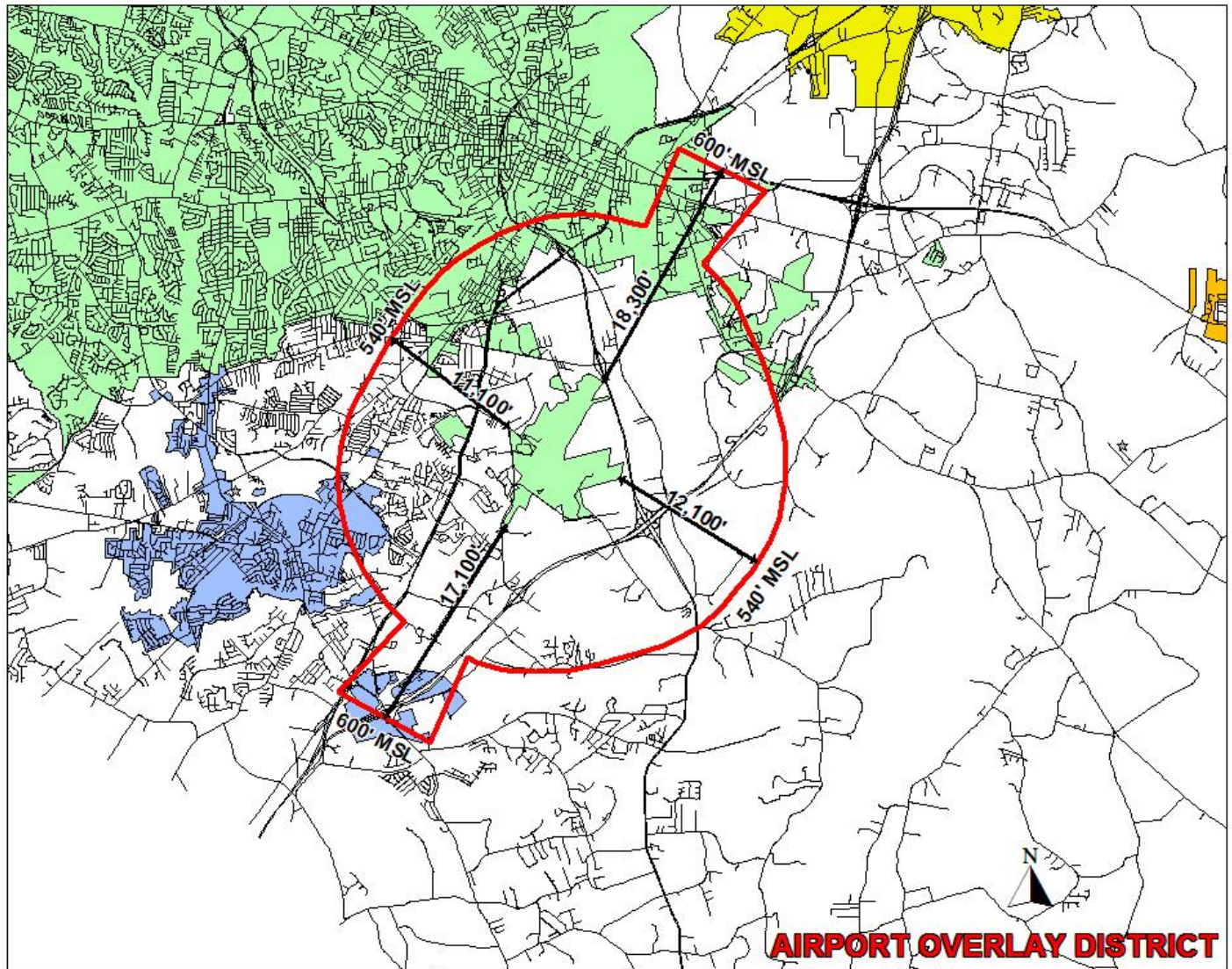
One of the first actions needed to conform with the Airport Master Plan and the 2030 Growth Vision Plan was an amendment to the County Zoning Ordinance by creating the Airport Overlay District to better define land use and development standards. What follows is a synopsis of the regulations that were adopted in September 2008.

The purpose of the Airport Overlay District (AOD) is to protect the public health, safety and welfare in the vicinity of the Fayetteville Regional Airport by minimizing exposure to and giving public notice of probable high noise levels and accident hazards generated by the airport

operations and to encourage future development that is compatible with the continued operation of the airport and the economic well being of the County.

Airport Overlay District Map

The boundary of the AOD is established as a layer on the Official Zoning Map, Cumberland County North Carolina in digital format.



Area Land Uses

All allowed area land uses within the AOD should be compatible with the continued operation of the Fayetteville Regional Airport and consistent with the 2023 Off-Airport Land Use Plan, or subsequent adopted amendments to the Official Zoning Map, Cumberland County North Carolina. Any petition for rezoning of properties located within the Airport Impact Zones should not be favorably considered except where such request is consistent with the following recommended three area land uses and densities:

- Airport Impact Zones 1, 2 and 5 are zones where the recommended land uses should prohibit residential development and allow low impact (less than five people per acre) non-residential development.
- Airport Impact Zones 3 and 4 should allow zero to low density residential development or non-residential development ranging from 25 to 40 people per acre.
- Airport Impact Zone 6 should generally allow low density residential development and non-residential development accommodating fewer than 100 people per acre.

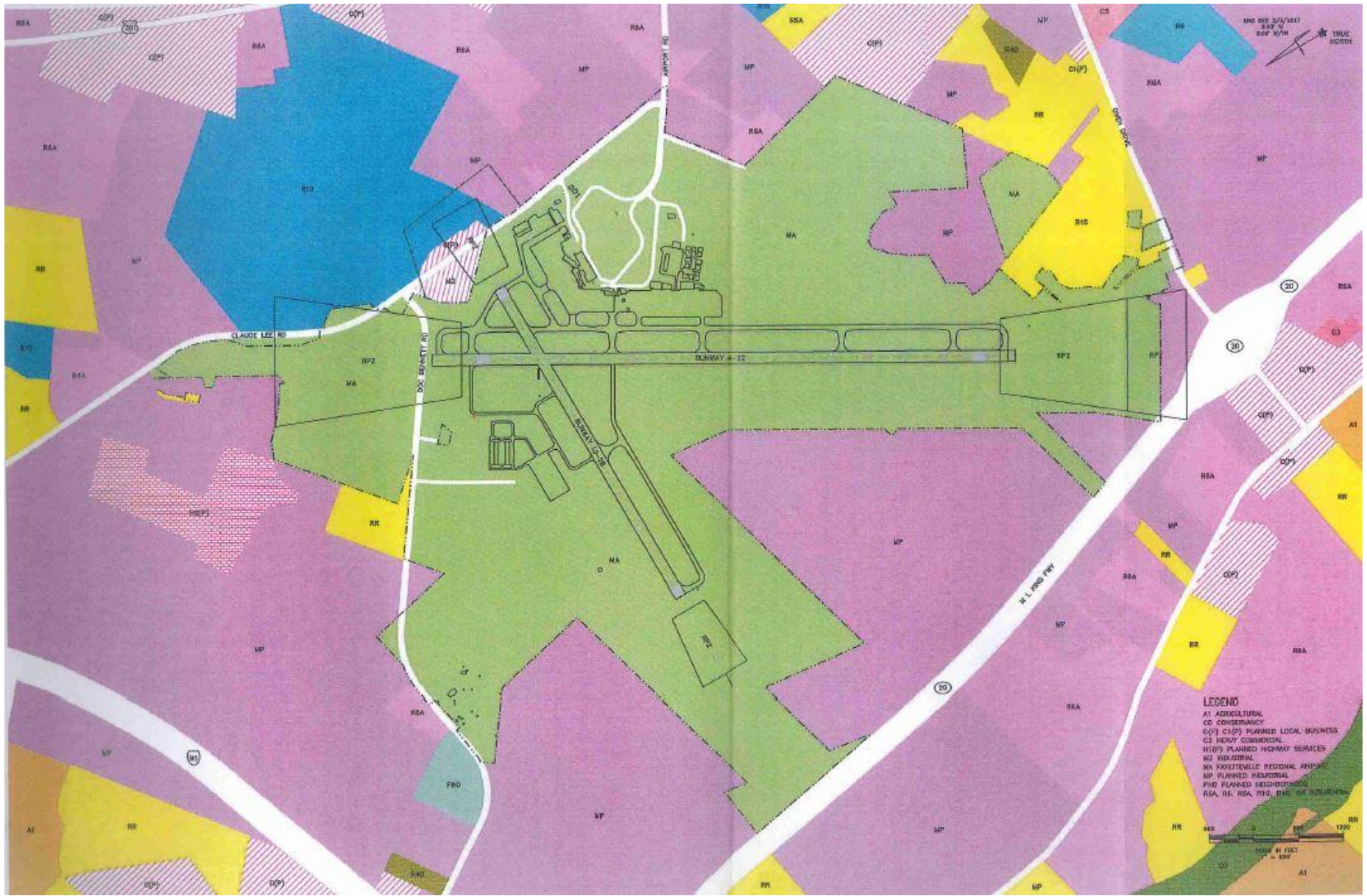
Any district that would allow a use incompatible with the airport operations should not be favorably considered without a favorable recommendation for the Fayetteville Regional Airport Director. This includes uses that would cause the following:

- A high concentration of residential dwelling units, specifically at a density of more than two dwelling units per net acre;
- A use that would cause a high concentration of people, such as: indoor recreation, schools, medical facilities and the like;
- Release into the air any substance that would impair aircraft visibility or otherwise interfere with its operation;
- Produce light emissions, either direct or reflective, that would interfere with pilot vision, result in glare in the eyes of pilots using the airport or diminish the ability of pilots to distinguish between airport lights and other lights;
- Create electrical interference with navigational signals or radios or radio communication between the airport and aircraft;
- Construct tall smokestacks or television, telecommunication and/or radio transmission towers; or
- Attract birds or water fowl in such numbers as would create a hazard and interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport, such as storage of garbage, etc.

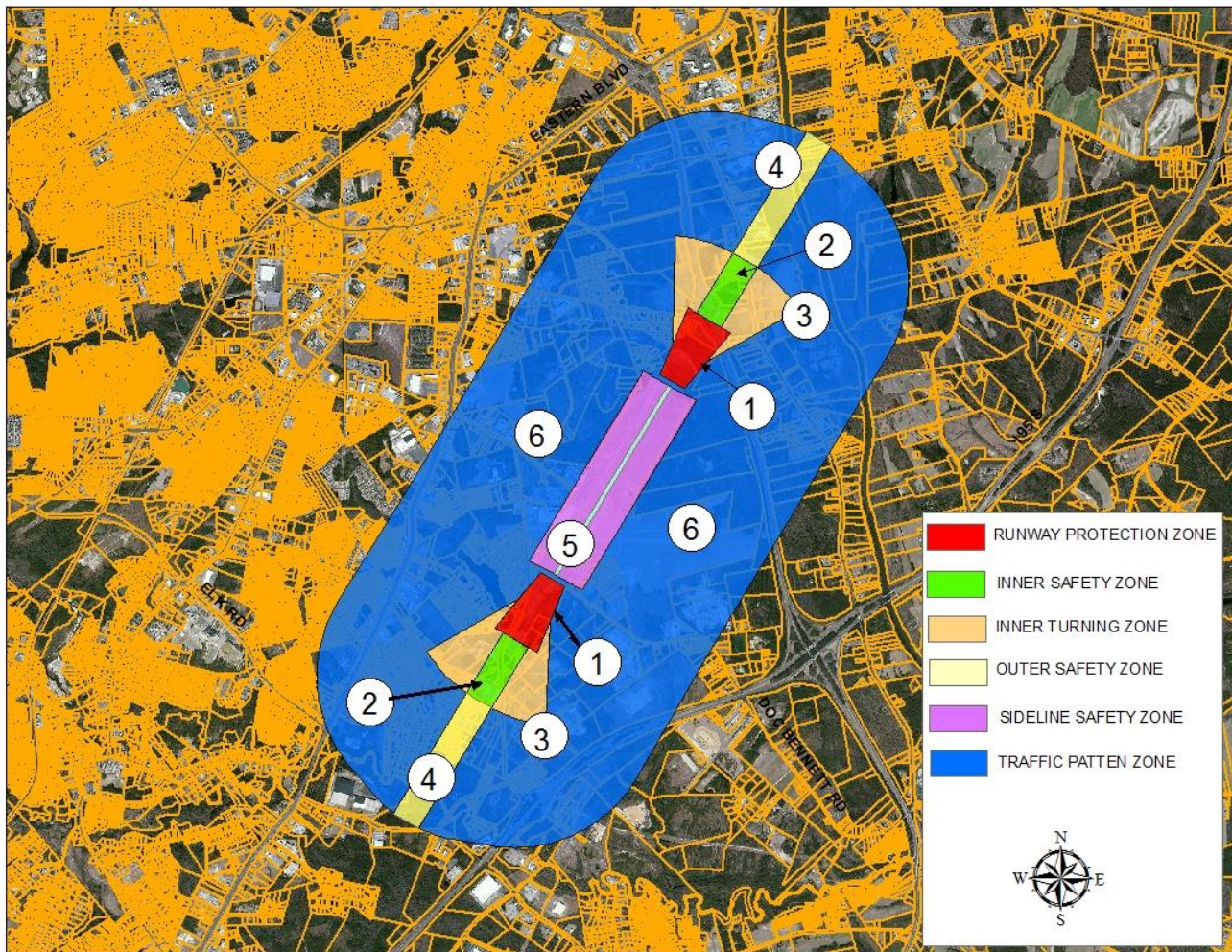
Source:

http://www.co.cumberland.nc.us/planning/downloads/county_ord_amendments/zoning/Airport_Overlay_District_09.15.2008.pdf

Off-Airport Land Use



AIRPORT IMPACT ZONES



SECURITY

Security Environment

Security issues related to air travel have changed considerably since September 2001 and will continue to evolve as new procedures and technology are incorporated to improving airport security. The airport has security fencing around the terminal area and surrounding the airport to keep the runways and exterior portions of the airport secure and clear from outside concerns. The airport also has security screening operations manned by the Transportation Security Administration located on the upper level of the Main Terminal Building. The screening operations are also scheduled for improvements, increasing the number of screening lanes and improving the expedition of passengers. More detailed information can be found in the Airport Master Plan.

Aviation Plan written by the
Fayetteville Area Metropolitan Planning Organization
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Transportation Technical Coordinating Committee

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